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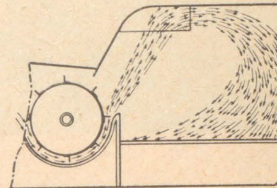
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Searching For The Truth

by H. H. Hannam,

President, Canadian Federation of Agriculture

A prominent Canadian said once: "If you develop an informed public opinion by means of a systematic discussion group programme, such as National Farm Radio Forum, your farm movement cannot properly be termed a pressure group. Or if it is, then I am all for that kind of pressure group." It is desirable, yes, essential, for the healthy functioning of democracy.

More than ever before, democracy must be vital and virile and prove its superiority by performance if it is to meet and prevail over the ideology of the Iron Curtain. The best way to meet a crusading faith, as Barbara Ward says, is with a better one.

The national organizations — the CAAE (Canadian Association for Adult Education), the CBC (Canadian Broadcasting Corporation) and the CFA (Canadian Federation of Agriculture), and the people joined together in farm radio forum are making an admirable contribution to this objective.

The farm radio forum project is the major educational programme of the Canadian Federation of Agriculture. It is an extremely valuable one. Without farm forum the extra-ordinary progress made by the Federation would not have been possible. Without farm forum, the Canadian Federation could not have taken the

prominent place it has taken in helping to create and develop the IFAP (International Federation of Agricultural Producers). Without farm forum, the active participation of local people in Federation activities would have lacked in scale and purposeful drive — the life blood of a people's movement. A by-product of farm forum, and a useful one which is difficult to appraise, is its public relations value in informing its apparently large non-farm listening audience.

In Quebec, the Farm Forum Association is in a unique — and in one sense a privileged — position. It enjoys direct affiliation with the CFA which is not the case in any other province. This arises because of the dual position of the Quebec Farm Forum Association which functions as the directing body of the local and district forums and as the Federation's provincial organization unit for the English-speaking counties of the province of Quebec.

In many respects, this set-up is good. Proof is that its record as a member body of the CFA has been excellent. One of the outstanding features is that the whole organization is built on and around active, informed discussion group community locals which would be an ideal enlightenment building basis for any people's organization.

The Choice Is Ours

Our forefathers, in a great many cases, were rugged individualists. They moved into the unchartered wilderness and built homes for themselves. They grew their own food, made their own butter, slaughtered their own livestock and tanned the skins to serve a variety of uses. It was a pioneer society based on subsistence farming. It was the world of yesterday.

The old order changed. Man became a specialist. He began to do one job and exchange the results of his labour with other men. In all, mankind benefited. Living standards began to rise. Industry became compartmented, each section doing a specific job, agri-

culture was slow to follow but increasingly the trend turned toward a greater degree of specialization. Man became dependent upon man. A breakdown in industrial techniques on the home front, a political upheaval in an almost unknown country thousands of miles away sent out ripples of unrest which had repercussions far beyond the narrow confines of an individual country. These tensions affect the lives of people all over the world. This is the world of to-day.

This world of to-day is a world of shrinking time and distance. The currents of human thought are spill-

(continued on page 4)

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Frozen Foods Are Tasty Foods

by J. David

Only the rich used to be able to enjoy strawberries in January. To-day, thanks to the advance of science, we can all eat our favourite fruits and vegetables in season or out, and at a price we can afford.

DURING the last few decades, we have seen considerable developments in the field of frozen foods. Commercial plants have been built in increasing numbers to prepare foods by the process of quick freezing. Locker establishments have appeared in various sections of the country where home produced fruits, vegetables and meats can be stored. Home storage units or freezers now permit the keeping of frozen foods directly in the home.

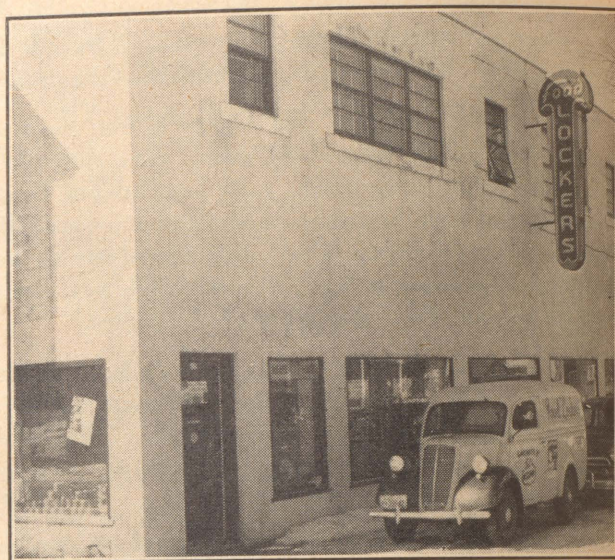
To the nutrition conscious housewife the appearance of frozen foods has brought out the matter of their nutritive value. What has happened to all those nutrients that used to be present in these fruits, vegetables or meats before they were frozen? Can she still plan a balanced menu with frozen foods so as to supply the needed amounts of the vitamins, for example, or will she have to alter her ideas regarding the amounts of the various foods required to supply the daily requirements of the family? The research people have been working hard to find the answers to all these questions, and while the picture is not complete, we have a fairly good idea at the present on the effect of freezing on the nutritive value.

The foods we eat contain a number of essential parts which include proteins, carbohydrates, fats, minerals and vitamins. After digestion, these components are either used by the body in building tissues and fluids or are converted into energy by oxidation. The proteins, carbohydrates and fats of the food are the sources from which the body obtains its energy. A large variation in composition exists within each of these three groups and certain parts of the proteins and the fats are essential for body building and well being.

A number of inorganic ions, commonly called minerals are absolutely essential to life. Calcium, phosphorous, iron and iodine are usually the ones involved in deficiency diseases since they are often lacking in the human diet.

The last group of nutrients, the vitamins, while the least important in quantity, are nevertheless just as essential as the other for well being. Their absence in our diet can result in a number of deficiency diseases. One of the main concerns of the food technologist or the home economist is to try to retain them to the highest degree in the foods where they normally appear.

There are so many nutrients and so many types of foods such as fruits, vegetables, meat, fish, dairy products,



Modern technology has made it possible for us to enjoy June fruits in January. This model food locker stores fresh-frozen fruits and meats for its customers throughout the year.

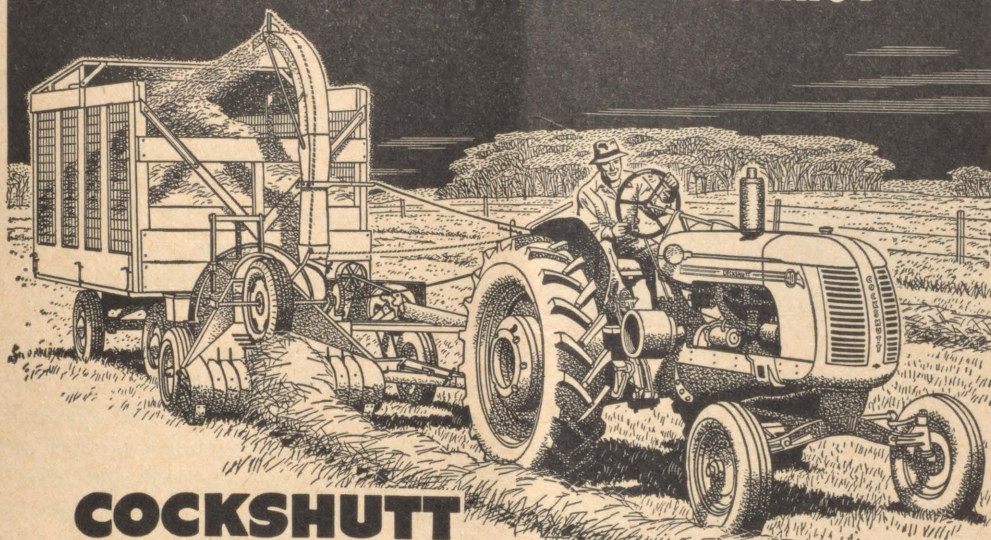
most of which can be frozen that only the main points can be brought out here on the effect of freezing on the nutritive value of these various foods. It must be understood that freezing is done only to preserve the nutritive value and the delicate flavor of the fresh food. It will definitely not improve on the quality of the original product. Since the quality of fresh fruits and vegetables, for example, is the highest immediately after harvest, this is the best time to freeze them.

Most of the studies on the relative value of unfrozen and frozen foods have been concerned principally with possible losses of vitamins. The few investigations carried out on the protein, carbohydrate and fat fractions of foods have indicated that their nutritive value is substantially unchanged by freezing. Storage, particularly at high temperatures such as 10° to 15°F as compared with the recommended temperature of 0°F may cause some change, usually more in palatability than in nutritive value.

The Vitamins Are Frozen In

It also appears that freezing has no adverse effect on the mineral content of foods. In fact, freezing may exert a certain beneficial effect on the availability of at least some minerals. Certain minerals, such as iron, may be present in a fresh food in a form which the body cannot use. Thus, fresh spinach is a good source of iron but only about 20% of it is available to our bodies. One study has reported that the iron content of a number of frozen foods was somewhat lower than the corresponding fresh foods but its availability in the frozen foods

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Here the food packages are being put into the freezer for quick freezing. Once this has been done they will be moved to the lockers and stored.

was on the average about 20% greater than that of the fresh.

There may be a slight amount of drip of cell juices from products which must be partially thawed at least before cooking. These are negligible for quick frozen fish, meats and poultry. The syrup draining from thawed fruits is usually eaten along with the fruit, thus there is no loss of minerals. However, vegetables present a particular problem. They must be blanched in order to inhibit enzyme activity to ensure proper keeping. Enzymes are chemical substances present in fresh vegetables. If uncontrolled these substances will cause deterioration of the produce even at low temperatures. This deterioration takes the form of off-flavors, bad odors and loss of vitamins.

This blanching is carried out in steam or boiling water and the vegetables must be cooled before packaging and freezing. These operations will result in a certain amount of losses in minerals and sugars by leaching. However these losses will be small if blanching is not carried to excess and if cooling is done in the minimum time possible with ice water.

In cooking vegetables, the usual procedure is to drop the solidly frozen vegetables into boiling water. Since frozen vegetables require less cooking than do fresh vegetables the amount of minerals going into the cooking water is likely to be smaller since they are not in contact with the water for as long a period of time.

Of all the vitamins present in foods, vitamin C found in fruits and vegetables is the one which is most easily destroyed or lost. While the freezing process itself and the storage at 0°F do not result in any losses of this vitamin, a certain amount of losses will occur during the preparation before freezing. Holding the fruits and vegetables at room temperature for a long time is harmful to this vitamin. The blanching process already mentioned

will also cause some losses. All these losses will add up to 20 or 30% when the frozen product is compared to the original fresh product. However, these losses are relatively small when one studies the losses occurring in the so called fresh vegetables which we find on the market, vegetables which very often were harvested 3, 6 or even 10 days before they are consumed. They may have been shipped for great distances, and kept at high temperatures for days. When we stop to consider the varied experiences of the vegetables which make up our meals, we are thankful that they are able to retain as much nutritive value as they actually do, but at the same time, we must realize that some of the nutritive value must be destroyed. Fruits and vegetables which have been frozen shortly after harvesting lose some vitamin C but the losses are small when compared to the fresh fruits and vegetables usually available.

Since the vitamins in the B group, thiamin and riboflavin, are water soluble, losses during the preparation of vegetables for freezing are to be expected. Losses up to 25% have been reported for a number of vegetables. As with vitamin C, freezing will not affect these vitamins further. However, meat is an excellent source of vitamins in the B group and no losses occur in them during freezing or freezing storage.

Vitamin A is not water soluble, therefore no losses are expected to occur during the preparation of vegetables for freezing. A review of the work done on the retention of carotene or vitamin A in vegetables during preparation for freezing, freezing, and storage shows that little loss in this vitamin occurs during these operations.

In conclusion, one can say that, although certain losses do occur in the preparation of certain products such as fruits and vegetables for freezing, the nutritive value of foods preserved by this method is very high and compares very favorably with the fresh foods from which they were prepared. The housewife should have no hesitation in including them in her menus. She will also find other advantages in using them such as economy, ease in preparation and utilization, and natural appearance and flavor. She can bring June in January by serving green peas, corn on the cob and strawberries which possess a flavor resembling greatly the flavor they had when harvested.

(continued from page 1)

ing over national boundaries carrying the ideas of freedom and equality of all men to all races. The economic and social implications inherent in these ideas are forcing us to acknowledge the "oneness" of our world. If civilization as we know it is going to survive we must learn to work together with all men on terms of equality of status and opportunity. Co-operation or catastrophe — the choice is ours.

Better Seeds Mean Increased Efficiency

"When farmers buy grain for seed they choose by variety. When they buy forage crop seeds they are content to ask for timothy, clover or alfalfa. They are not variety conscious. It is the job of the newly formed Canadian Forage Seed Project to change this point of view. To make the farmer conscious of the variety he buys. To ask for it by name." This comment was made by Mr. J. W. McKay, chief, Seed Production, Plant Products Division, Ottawa, during the course of an address he gave under the auspices of the Agronomy Department, Macdonald College, on April 21.

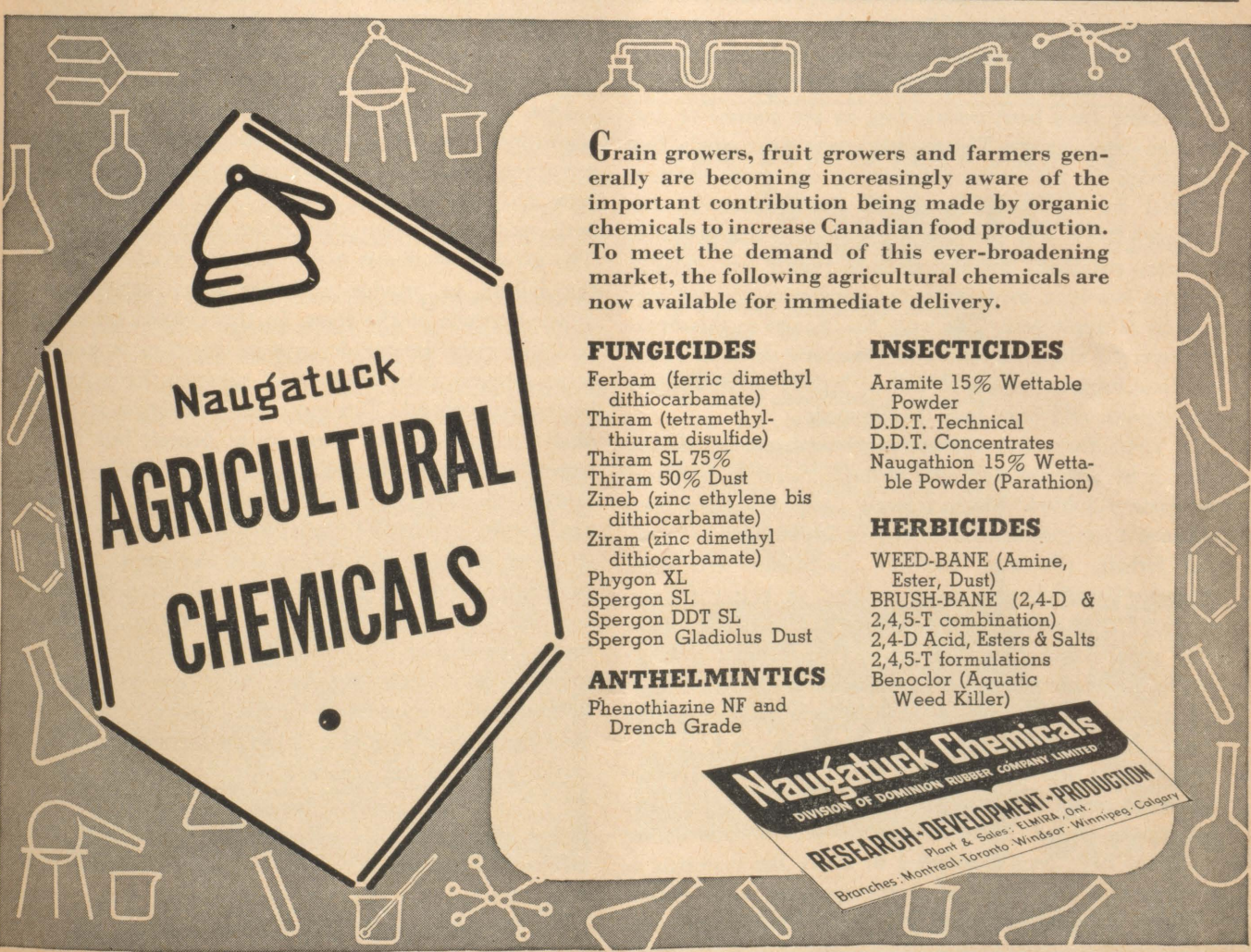
"Grassland farming is becoming more important to the agriculture of eastern Canada, and if we are to derive full benefit from this change we must use only the best seeds for the growing of pastures, grass silage and hay crops," Mr. McKay stated. "In addition," he went on, "seed crop production is big business. Last year the value at the farm level of Canadian exports of grassland seeds amounted to \$35 million. This factor introduces a further problem, not only do we have to produce seeds which are suited to our climate, but we also have to keep in mind the kinds and varieties best suited to

our export markets which are mainly in the United States."

The sponsors have decided to concentrate first on the more commonly grown grasses such as timothy, red clover and alfalfa. The varieties chosen for timothy are Medon and Climax; for red clover, Lasalle, which is a physical blend of Dollard and Ottawa; and for alfalfa, Grim. The initial production target has been set at 20 percent of the domestic consumption. It is hoped, however, to increase this in later years.

The scheme works in this way. The foundation stock is sold to specified growers. The seed crop these men harvest is labelled "approved" by the Forage Seed Committee who buy the seed back. The same procedure is followed the next year, the harvested seed being called "registered" and in the final year "certified." The seed is then ready for the market and will be handled by the trade as a "name" brand.

What does all this mean to agriculture? It means better seed for more productive crops. It means more animals per acre, which in turn means greater efficiency for Canadian agriculture.



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Modern Methods In Orchard Spraying

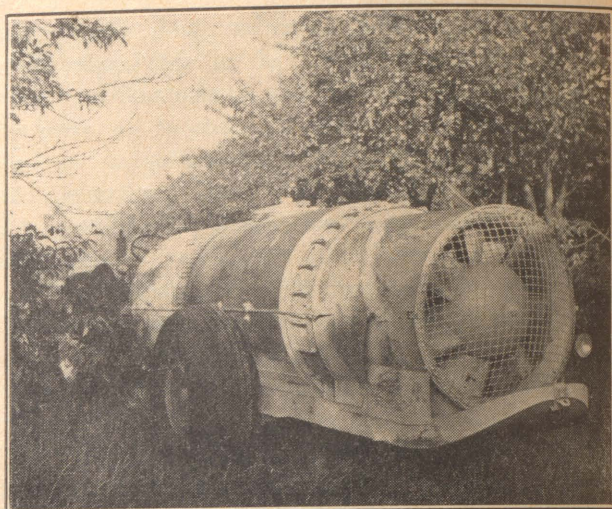
by C. E. Petch

Scientists are fighting a constant battle to keep one jump ahead of the bugs. New sprays are constantly being put onto the market to combat insects which, in the face of all the old sprays, seem to have taken on a new lease of life. In this article Mr. Petch gives us some inside dope on what's new in orchard spraying.

IN the past few years drastic changes in orchard spraying have occurred. The changes have been principally in the spray materials and applicators. The old insecticides, such as lead and calcium arsenates, have not given satisfactory control lately of biting insects, such as codling moth and plum curculio when they became epidemic and the growers have changed quickly to the newer organic poisons, such as DDT, parathion and many others when they became available. Then, again, the sudden upsurge of the European red mite necessitated the use of new miticides and the manufacturers have not been slow in placing numerous compounds on the market to replace dormant oils. Tests with the newer materials have shown that while none has been satisfactory against all the pests, some have been outstanding in the control of one or more fruit insects. The tendency now is to apply this knowledge in the orchard by using the most effective material for the insect which is most destructive, for example DDT for codling moth, aldrin against plum curculio, parathion for European red mite, etc. Similar progress has been made with the fungicides for the prevention of apple scab. The urge for change in this situation was to eliminate Bordeaux mixture of fruit russet and lime sulphur because of foliage injury, which affected tree growth and fruit bud development.

In 1946, there was a tremendous replacement of lime sulphur by flotation sulphurs, wettable sulphurs and later by paste sulphurs. More recently, sulphurs have been replaced to a considerable extent by glyoxalidine (Crag) and ferbam (Fermate, Karbam, Carbamate and some others). These changes have resulted in better foliage, increased tree growth and larger fruit buds, which have been reflected in increased production without any increase in the prevalence of apple scab or a reduction in the quality of the fruit. When the cost of these newer fungicides is reduced more of them will be used.

The other significant change has been machinery designed to apply the materials efficiently and at a greatly accelerated speed so as to reduce labor costs. Some machines have been developed to apply the materials as concentrates, by which is meant spraying with greatly reduced amounts of water. Air has been partially sub-



This speed sprayer, equipped with concentrate nozzles, has one big advantage over most other spraying rigs. It ensures adequate coverage in the shortest possible time with minimum labour requirements.

stituted for water as the carrier and dispersal agent. There are many types of these machines on the market and, while improvements will be made to them in the future, the best models have already given very satisfactory results in both insect and disease control.

Due to the very recent development of this type of applicator, it is not surprising that some of the machines were not capable of doing good work. The demand has been so excessive that several types of machines have been marketed before they were sufficiently developed. The greatest weakness in the inferior machines has been the failure to provide sufficient spray deposits in the upper portions of the trees. In this connection it can be said that even greater deposits in tree tops from concentrate sprayers than from hand spraying have not given better pest control. This indicates a weakness in the physical condition of the concentrate deposit but this deficiency in the spray formulation will probably be corrected shortly. Satisfactory results from concentrate sprayers can not be expected in mature orchards unless pruning has been done in such a way that the spray can readily penetrate to all parts of the tree. If branches overlap, especially when the trees are in full foliage, then the under branches will be screened from the spray and will remain unprotected. Another cause of poor results has been the lack of coverage in the tops of very tall trees. Such trees should be headed back far enough to meet the capacity of the sprayer.

Concentrate Sprays Save Time

The spray materials in common use can be applied as concentrates but the correct degree of concentration for each material has not yet been worked out. However, until this information is available growers should use

them at four times concentration, or as it is expressed 4X. In brief, this means that four times the amount of spray materials is put into the same quantity of water used in high pressure sprayers for ordinary hand spraying. For example, if you are using 6 pounds of wettable sulphur to 100 gallons of water as a dilute spray then the amount of sulphur would be increased to 24 pounds in a 4X concentrate. The other materials used in the same application would likewise be increased four times. This concentrated solution should be applied so as to cover at least four times the tree area covered by an equal quantity of dilute spray. Bearing these figures in mind, it is very obvious that the saving of time in refilling and travelling to and from the filling station should cut the time of application very greatly.

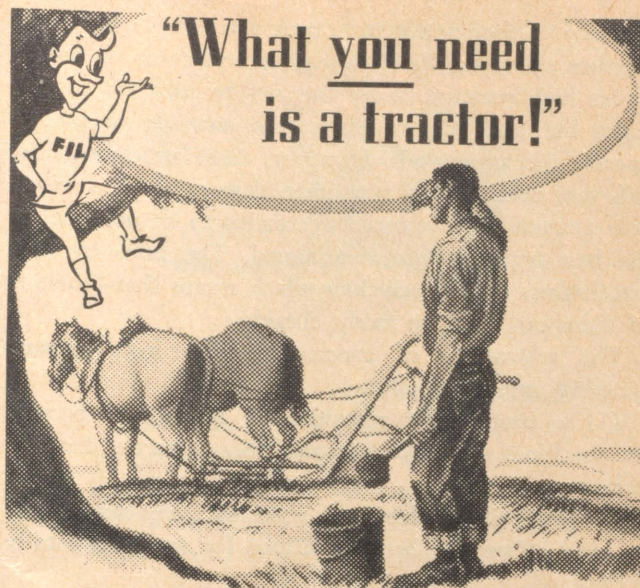
Hand spraying with high pressure machines requires usually three men, whereas concentrate spraying needs only one man to operate the sprayer efficiently and drive the tractor. The labor costs are thereby reduced by two-thirds, which amounts to a considerable financial saving. In addition, it lessens the need for man-power, which is becoming a scarce commodity in rural areas, especially when orchard operations are most pressing.

The saving in spray materials is not of much importance, except in the early sprays, because the recommendations require the same amounts per acre as suggested for hand spraying. However, as there is little or no runoff in concentrate spraying more of the spray will adhere to the trees and this should be of some value. Another point, which is often of much importance, is that good types of concentrated sprayers apply spray material quite satisfactorily to the undersurface of the leaves and this is extremely important in the control of mites and certain insects.

In addition to complete concentrate sprayers there are many types of attachments which can be adjusted to the rear of high pressure machines. Some of these units will turn high pressure sprayers into concentrate machines and if they are properly constructed should work satis-



Speed is essential when spraying. This old type sprayer is not only slow, but costly in labour requirements.



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factorily. Other types of attachments apply the spray mixture in dilute form through set patterns of nozzles under high pressure. They can not be used for concentrates but their use eliminates the necessity of men to operate the spray rods. However, these attachments are still very much in the experimental stage and a considerable amount of investigation remains to be done before the best types can be determined. The price of these attachments is relatively low which means that changing to them can be done fairly cheaply.

The advantages of concentrate over high pressure spraying are principally:—

(1) a considerable reduction in man-power because the machines are automatic and only a tractor driver is necessary;

(2) since the machines are automatic they can be used at night when the best conditions for spraying usually prevail;

(3) because so much less water is used the time required for spraying can be very greatly reduced;

(4) in periods of water shortage concentrate spraying offers a greater possibility of applying the spray and at less cost;

(5) due to the rapidity with which concentrates can be applied there is a much better chance of applying the sprays at the proper time, which is so essential to apple scab control.

In these times of high cost of production and relatively low returns for apples the concentrate method of applying spray materials will probably be adopted very rapidly. That this new method will be the fashion for the future is indicated by the fact that any grower who has used it has not returned to high pressure spraying. This is probably the most effective answer to any criticism that may be advanced against the future place of concentrate spraying in apple production. Nevertheless, it should be borne in mind that there is no substitute for thorough spraying, use of tested materials and proper timing. New materials or new machinery will not replace these essentials of a successful spray programme.

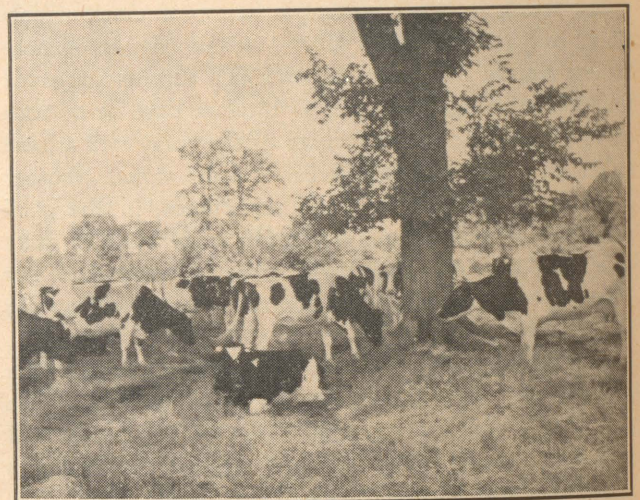
Shade Is Important

CANADIAN dairy herds spend most of their lives in the barn, for approximately seven months of the year they are fed indoors. This represents high cost production, and in order to reduce the cost of producing milk over the year it is essential that summer production be kept high and costs down. In the March issue of the Journal the importance of pastures in this respect was stressed. There is, however, another angle that has considerable bearing upon the amount of milk produced during these low cost months, and that is the amount of shade available for the cattle during the heat of the day.

A pasture field containing plenty of shade trees not only looks good to the passerby, but it is good—good to the cows, and after all that is the important point. If shade helps to increase milk production during the low cost months it is well worth while to give it a little thought. High temperatures reduce the milk flow through reducing the amount of food the cattle eat.

Different breeds react differently to high temperatures. The most sensitive is the Holstein, and in Canada this animal forms the mainstay of the dairy industry. Shade, especially tree shade, is the most efficient method of maintaining relatively low temperatures owing to the moisture vapourization which takes place in the leaves.

Tests conducted in the United States have shown that the best production was achieved at approximately 50 degrees. A reduction in milk flow occurred after this temperature, but it was small amounting to less than 20 per cent until the temperature had climbed to over 75 degrees, when production began to drop off heavily. The factor which actually caused the decrease in milk production was, of course, the decrease in food intake. As



Trees provide excellent shade in which a milking herd can escape from the fierceness of the mid-summer heat.

the temperature rose the cattle became less inclined to eat their full ration with the result that milk production suffered.

The number of cattle on dairy farms in Canada has been decreasing over the last few years. Dairymen have been going out of milk production and into more profitable lines. It is essential, therefore, that the dairymen who remain in milk production take into consideration every factor that is likely to have a bearing on their costs of production. It is in the field of decreasing costs rather than higher prices that the solution to many of the problems which beset the dairymen can be solved.

Consumer resistance to higher prices is becoming apparent everywhere, and even though the increases in the



Cows subject to the full force of the summer sun often reduce their feed intake, with resultant loss of milk production.

price of dairy products has been less than in other lines, if the farmer is to maintain the goodwill of the consuming public it is essential that he turn to cost reduction rather than higher prices to maintain or increase his income.

Grass Silage a Good Investment

Mr. C. E. Thompson, is another of the many farmers in Nova Scotia who are completely sold on grass silage. But, unlike some who have used expensive machinery to harvest the grass, Mr. Thompson has only used the hay-making machinery that is to be found on any farm, and he has found that he has been able to store a very fine product.

Last summer, he cemented the sides and one end of his pit silo, making a finished pit 150' long, 10' wide and 9' high. In this pit, Mr. Thompson stored an estimated 200 tons of timothy and clover hay, in long length, just as it was cut by the mower. No preservative was used, it was stored immediately, no matter how wet, and Mr. Thompson considers that he has better silage than he ever had. He has had practically no spoilage, other than a couple of spreader loads at the mouth of the pit.

The only way in which Mr. Thompson can account for the quality of his silage is that he used a heavier tractor than many farmers use to tramp the grass in the pit, and he kept the tractor going continuously while filling. In other words, he did a better-than-average job of packing the material being ensiled, and profited thereby. When the pit was filled, it was covered with about three inches of sawdust as a seal.

Mr. Thompson feeds his herd about thirty pounds of silage once a day, at noon, and he has found that he has been able to cut down his millfeed purchases by about 50%. Hay is fed once a day, also. Production is uniform, the herd is milking steadier, and production seems to be holding over a longer period. As far as he is concerned, grass silage is a good investment.



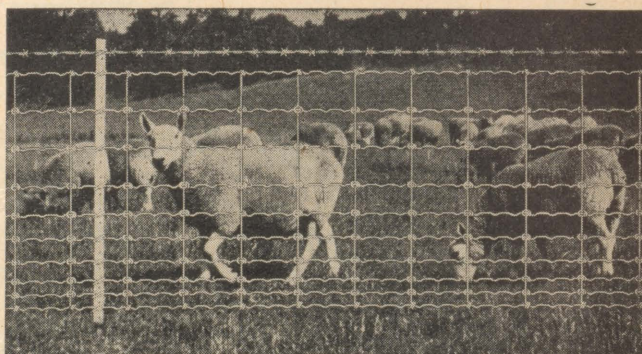
The new edition of the "Royal" booklet, "Farm Improvement Loans", explains how you may borrow up to \$3,000 at 5% simple interest. The loans may be used for practically any farm improvement, from fence repairs to electrification.

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Huntingdon Farmers Like Grass Silage

THEY'RE big boosters for grass silage down in Huntingdon County. The two meetings put on by the Huntingdon County Farm Forums in the local high school on April 22 and 23, proved this. They enjoyed packed meetings both nights with enough audience participation to keep the four panel members Gerald Moore, a 300 acre farmer, Alex McCaig, a 130 acre farmer, Angus Banting and Howard Stepler, both of Macdonald College, on their toes when question period rolled around.

Grass silage is a high protein feed. It preserves more of the nutrients for animal use than any other known method of putting up feed. If grass silage is fed in adequate amounts no other concentrates need to be fed. Last year Mr. McCaig fed no supplementary concentrates at all, while his milk production increased over previous years. Mr. Moore did feed extra concentrates but felt that had he fed grass silage in adequate amounts this would have been unnecessary.

On the question of wilting both farmers felt that it was necessary to reduce the water content of the grass. They both agreed with Howard Stepler, however, that it was better to err on the side of too much moisture rather than too little.

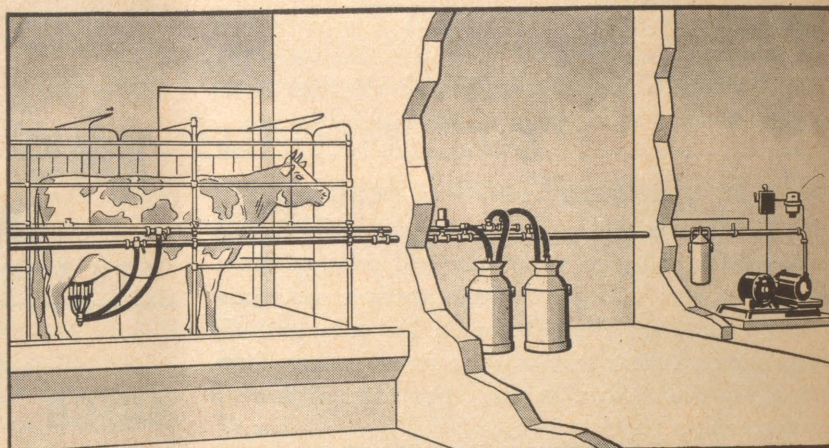
Do farmers need extra machinery for harvesting grass silage? "No," said both farmers. Alex McCaig uses his ordinary haying equipment and finds it very satisfactory. Gerald Moore has a forage harvester which he uses as a corn harvester also. He does some custom work with the machine which makes it worth having. "If the machine pays its way, that's fine," says Gerald Moore, "but it's not necessary, you can get on without it fine."

What about silos? One farmer has a trench, the other an upright, and

they liked both kinds. Last year neither farmer used a preservative and they found they had no spoilage. The Journal dealt fully with this question of building and filling trench silos in an article written for the December, 1951 issue. (Copies can be had on request to Box 260, Macdonald Col-

lege.) Both farmers used different coverings for their silos. One had sawdust, the other tar-paper and sod, but as Angus Banting said, "Anything at all that will form an airtight cover will do. Earth, grain, limestone or any other material will serve the purpose."

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A Co-op Pig Hatchery Reports

In the November, 1951, issue of the "Journal" it was suggested that pig hatcheries may revolutionize the hog industry. Here is a report on a hatchery which opened last spring in the Tisdale area of Northern Saskatchewan. This hatchery is expecting to be in full operation this spring when all of its 65 brood sows are expected to have produced litters.

First litter was born in the hatchery early in September and applications for weanlings have been so heavy that more have been received than can be accepted for the present.

Nearly \$4,000 in cash has been contributed already by 38 farmers who have become members. The organization is on a share capital basis. Shares are \$10 each but the minimum investment is 10 shares, one-half being paid in cash, the other half subscribed. There is no membership fee and each member has \$50 or more in cash invested with an equal amount being subscribed to be called when required. Priority for distribution of pigs is on the basis of the amount of share capital subscribed.

The hatchery is located on the premises of the Caribou co-operative farm two miles west of Tisdale. The hatchery co-operative has arranged for the co-operative farm to provide the management and labor for the enterprise. A large barn on the premises has been converted into pens for the sows and their litters.

All of the brood sows bought by the hatchery co-operative were selected for their prospective ability to farrow high quality, large litters. The aim is to supply top quality weanlings for commercial production and no attempt will be made to supply registration papers.

Disease prevention is a prime requirement in this enterprise. When sows are first brought to the farm they are segregated in special quarantine pens for four weeks. A veterinarian is called to examine them for signs of disease before they are moved to their permanent quarters near the barn.

Management and disease are the most important factors in an enterprise of this kind, according to H. E. Chapman, of the Saskatchewan department of co-operation, under which the pig co-op operates. Every effort is being made to ensure that these factors receive proper attention.

In an initial comparison between the loose housing barn and the standard stanchion barn for dairy cattle at Lennoxville Experimental Station, Que., the average production of milk per cow for December and January was 469 lb. in the loose housing units as compared with 442 lb. in the stanchion barn.

Keep dairy feed against an inside wall; condensation from an outside wall will cause some grain to spoil.

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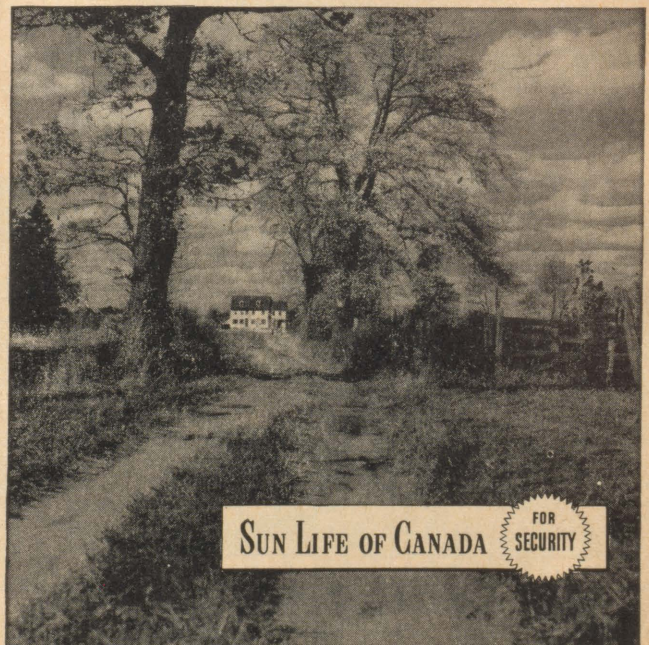
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SUN LIFE OF CANADA

FOR
SECURITY

Information Please!

This section should make interesting reading, for it is given over to the problems of our readers. Problems sent in by Farm Forum and other groups will be dealt with here.

FROM all reports this last winter has seen a lot of damage done to our trees and shrubs by mice. The question "What to do?" is answered for us by the Horticulture Division, Central Experimental Farm, Ottawa.

Answer: "Damage to orchard trees during winter by rabbits and mice is a hazard the orchardist has ever to face. It consists in eating off of the bark of the trunks (and sometimes of the lower branches) from close to ground level to a height governed principally by the depth of surrounding snow. Frequently a complete girdle of bark is removed; that is, the bark is eaten off continuously through the full circumference of the trunk. In such cases the tree would quickly die were it left in its injured state, for the sap from its roots would be unable to pass upward beyond the top edge of the bark remaining intact at the base of the trunk. When the bark has been eaten off in irregular, disconnected, patches, the flow of sap is diminished in proportion to the extent of the injury, the tree receives a correspondingly lessened amount of nourishment, and an attendant lowering of its vigor and vitality is the consequence. Fortunately even completely girdled trees can be saved, and will eventually be none the worse for their injury. One of the principal means of saving such trees is that known as *bridge grafting*. This, as the name implies, consists in bridging the bark-gap in order to provide the sap with a means of reaching the tree structure which is above the injury. This is achieved by grafting living scions into the uninjured bark above and below the gap, thus creating "bridges" over which the sap can flow upward to its proper destination. Trees of which the trunk bark has been injured either mechanically, as by orchard implements or the chafing of wire guards; by severe frost; or

by collar-rot and fire blight diseases, can be saved by this same means.

Tools and Materials Required

A strong, sharp, knife; a small claw-hammer; a screw-driver; a sufficient quantity of $\frac{3}{4}$ inch thin, flat-headed nails; grafting wax in heating pot with brush to apply. (Suitable prepared compounds to be applied cold are available through dealers in horticultural sundries.)

When to Bridge Graft

The best time to bridge graft is in the early spring after the first flush of sap has taken place and the buds on the tree have begun to swell. The operation can, however, be carried out at any time during the summer when the bark is slipping.

Scions

Scions consist of terminal shoots. They should be gathered while in a dormant state, that is, after leaf-fall in autumn and before the spring sap-flow begins. For repairing injuries which are confined to the trunk below the first main branches, scions should be taken from vigorous and hardy varieties. It is not necessary that they be from trees of the same variety as that which is being repaired.

Method Recommended

There are several methods, differing only in detail, in common use, and of these that known as the *double slit* method is here described and recommended. It is one of the simplest in practice and results in a good percentage of successful unions.

1. The first step is to trim the uneven edges cleanly and regularly by cutting away the bark with a sharp knife right down to the solid wood.

2. Select straight scions with as little taper as possible and about as thick as or a little thicker than an ordinary lead pencil. Cut these to a length some four or five inches greater than the distance between the upper and lower, trimmed, bark-edges. There should be a sufficient number to go around the trunk at intervals of two inches.



Steps in Bridge Grafting

1. Typical fieldmouse damage on a young apple tree. 2. The first step is to trim the ragged edges of the wound and scrape the surface. 3. Inserting the scion. Note the

flap of bark loosened under which the tapered end of the scion is placed. 4. Small nails hold the scions firmly in place. 5. Painting with grafting wax completes the job.

The two ends of these are now prepared, the long face should be 2 to 2½ inches long and is made by placing the knife that distance from the end of the scion and with one sweeping cut removing a narrow-wedge-shaped slice. After making this cut the bark is shaved off the sides to expose the cambium. These two faces, one at each end of the scion, must be in alignment so that they both will lie flat on the wood of the trunk. On the other side of the scion the bark is shaved off just deep enough to expose the cambium. In making this cut the cutting edge of the knife should just skim along the surface of the underlying wood. The tips of the scions are next bevelled, the appearance then being that of a chisel.

3. The next step is to prepare the bark for the insertion of the scions. Each scion should be handled independently of the rest, as a tight fit between scion and channel is absolutely necessary if a perfect union is to be achieved.

For the position of the first scion, choose an area of the bark which is reasonably smooth and lay the scion, buds pointing upward, so that its ends lie with the long-cut faces in contact with the position chosen, and with an equal overlap at top and bottom. Hold the scion firmly in position and with the knife-point score a clear line on the bark by running it along the sides of the scion where they lie in contact with the bark. Now lift the scion away and cut through the bark *accurately on one score mark* of each pair. Next cut through the bark *just inside* the other score mark. These cuts must be made *right through* to the wood. The two bark-flaps are now lifted from the wood with the screwdriver but remain attached.

4. The next step is inserting the scion, which is now taken in the two hands with the long-cut faces towards the trunk, and bowed sufficiently to allow the ends to be inserted under the flaps. As the bow is released the pressure will force the scion ends into proper position within the channels and at this point it is important to make sure that there is good contact between the sides of the scion and the bark edges of the channel. When this detail is found satisfactory, two small nails are driven through each end to hold the scion and bark-flap secure until union has taken place.

5. When all the scions of the tree being worked are inserted and tacked, brush grafting wax over and about the joins to prevent drying out.

Conclusion

In bridge grafting trees where the injury is restricted to the trunk below the first main branches, the buds should be rubbed off the scion-bridges after union has taken place.

Where the injury extends into the lower branches and is sufficiently serious to necessitate their removal, suitably situated buds should be left to form branches which will restore the tree to proper balance and shape. When these

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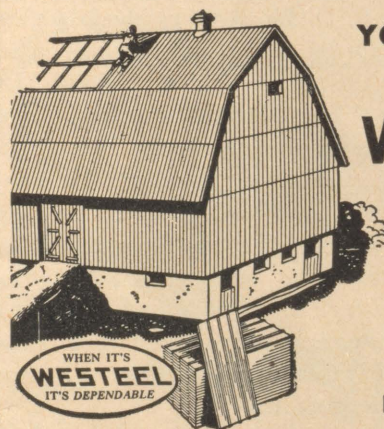
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have attained suitable size, they must be grafted with scions or buds of the same fruiting variety as the tree.

When rodent injury is discovered before it is timely to proceed with bridge grafting, the injured areas should be painted over with a Bordeaux-linseed-oil mixture to prevent undue drying-out. This is made by mixing 10 oz. of Bordeaux powder in 1 pint of boiled linseed oil.

Bark injury which occurs in the summer can be repaired when the season's terminal growths have reached maturity,

which is usually at the end of July or the beginning of August. On taking the scions, the leaves should immediately be removed. All other details of the operation remain the same.

It is hardly economical to bridge graft completely girdled young trees under 1½ inches in diameter. The better policy is to replace them or cut them off just below the girdle and train up a good strong sucker."

Sherbrooke District Farm Forum Sets Up Committee

A COMMITTEE of three, consisting of the chairmen of Sherbrooke, Compton and Stanstead County Farm Forums was set up to discuss ways and means of getting at the facts behind the present chaotic hog situation; to figure out how to get all the local groups interested in order that a definite plan of action can be undertaken. This committee to report back to the Farm Forum Live-stock Producers Committee upon the completion of their job.

Many other farm problems were discussed at the conference which was held at Lennoxville, on April 16, but this was the main theme which ran through the whole meeting. "Education before Organization", and what better place to start than in Farm Forum.

The meeting was presided over by Mr. Ritchie, the discussion leader being P. D. MacArthur, who laid stress upon the fact that the Quebec hog population was higher than ever before, and this in the face of a closed U.S. market. "We farmers," Mr. MacArthur stated, "have to find the cure to our troubles ourselves. We cannot rely on government to provide the solution. Too many hogs and the price is too low for the farmer. Too few hogs and the price is too high for the consumer. What are we going to do about this situation?" He said that he thought the answer lay "in continuity of supply, for this would aid the consumer as well as the farmer. However," he stated, "we have set up a committee to explore these problems. That is their job."

Keith Bradley suggested that, "too many farmers rush into hog production when the price is high, and get out when it is low. This," he said, "hurts the big operator. He has to stay in production, for the enterprise to the large producer represents a heavy investment in capital. High prices or low," he said, "the big operator has to keep in production unless he wants to go right out of farming."

The meeting got underway with the presentation of a brief by Fred C. Green, Sherbrooke Farm Forum secretary, outlining the problems facing agriculture, and their possible solutions. This brief formed the basis for discussion during the early part of the meeting. It led to

the conclusion that farmers should control their products through more of the marketing stages on the way to the consumer.

The ladies are to be complemented on the excellent dinner they served up for the benefit of the delegates. It showed what a fine spirit of co-operation existed among the three counties represented at the conference, and bodes well for the continued success of Farm Forum throughout that area.

Why Not A Feed Bank?

Many western farmers are becoming increasingly sympathetic to the eastern livestock feeders proposals to bring some order and stability to the fluctuating feed grain situation. The 'Saskatchewan Farmer' ran an editorial in a recent edition, entitled "Why not a feed bank?" which we quote in part. This editorial needs no comment, it speaks for itself.

"Eastern livestock feeders form one of the best markets for prairie coarse grain growers and their proposal to set up a feed grain bank in the east would seem to give westerners an opportunity to consolidate their position by building up supplies where they would be used.

There have been complaints from eastern feeders about the quality of western feeds, and the fact that the supply is very irregular. The feeders claim western feeds, after they go through the hands of the middle-men, are mixed too heavily with screenings and grain hulls. They say too that supplies, after the close of Great Lakes navigation, must be sent by rail, which raises their cost.

Building up a feed bank in the east, where the feeds are used, would seem one way of providing the eastern livestock feeder with an assured supply of better quality. It would be somewhat the same thing as an eastern manufacturer establishing a supply centre in the west to service goods and machines sold to prairie farmers.

There probably are other supplies open to the eastern feeder and if he doesn't get the quality and the quantity from the west he believes he should, he may turn somewhere else. Setting up stores in the east would seem one way of assuring the west of this market."

SUGARING-OFF



Norn Garriock, C.B.C. commentator, standing on rear platform interviews Stuart Hawke, for the benefit of his large farm radio audience.

Last March 26, the farm of Stuart Hawke at Farnham was a scene of bustling activity, for not only had the Brome County Farm Forum Association decided to hold a sugaring-off party, but the place was alive with C.B.C. men and equipment.

Norm Garriock, C.B.C. farm commentator was present. Len Cosh of the International Service made recordings which will be beamed to fifty-seven countries, including the United Kingdom and Australia. Norman MacBain and his technician, Norm Eaves, who had just returned to Canada from a year in Korea, recorded material for the British Broadcasting Corporation, the School Broadcast Department and the National Service of the C.B.C.



A crisp spring day, and plenty of good clean snow, makes a sugaring-off party something to remember.

Cables, microphones and recorders were strewn all over, operators with head-sets sat twirling various knobs. In spite of all this, however, the sugar was ready by three o'clock, and with plenty of good clean snow plus fifty-odd willing appetites, it was soon all cleaned up.

Norm Garriock recorded an interview with Stuart Hawke in the sugar shanty. Later in the afternoon he recorded an interview with Claud Witcher, dairy farmer; Laurence Horner, poultry; Gordon Shufelt, potatoes, and Earnest Bradley, hogs.

Cold separator parts cause the first butterfat that goes into the bowl from the tank to stick to the disks and sides of the separator bowl.

Cheap Ice Storage

Though the modern refrigerator using electricity or other means of energy, is replacing the ice-box in many rural areas, ice can still be used to advantage when a source of supply is readily available. And it can be stored without providing an elaborate ice-house.

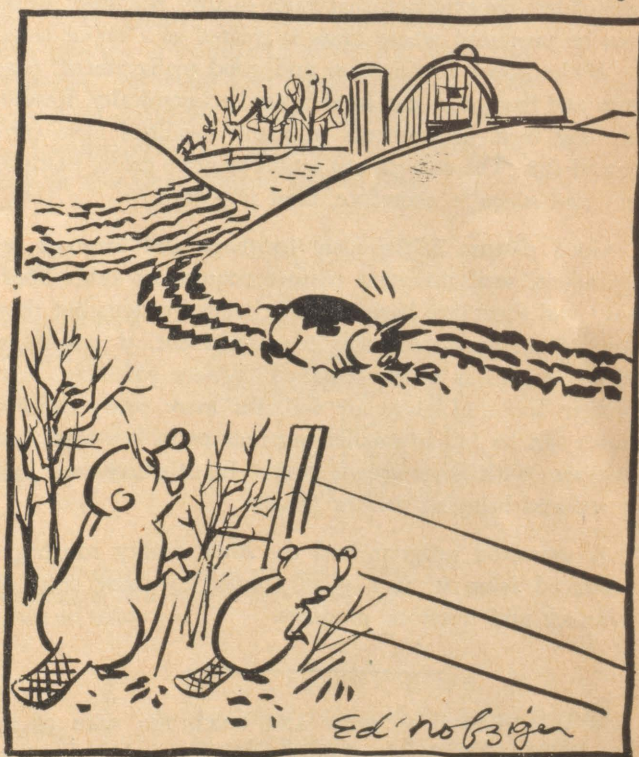
Any unoccupied corner of a shed will serve as a site for a rough-board enclosure. An enclosure ten feet square and eight feet high will hold enough ice to provide 50 pounds a day for 130 days, after allowing for a reasonable amount of wastage. The smaller the amount stored, the greater the proportion of wastage.

The bottom of the enclosure should be covered with about one foot of sawdust. If the soil beneath is impervious clay it will be better if there are a few inches of gravel below the sawdust. In putting in the ice the boards can be taken away from one side and be replaced when the ice is in position. A space of one foot should be left between the stacked ice and the side boards and this should be filled with sawdust. The ice should also be covered with sawdust.

It is the sawdust that keeps the ice from melting, and the drier the ice the longer it will keep.

"JOE BEAVER"

By Ed Nofziger



Forest Service, U. S. Department of Agriculture

"Now, there's a scientific hog—always roots along the contours."

The Selection Of Strawberry Plants For Propagation

Proper selection of strawberry plants for propagation is of great importance in safeguarding the vitality of a variety. Only by retaining disease and insect free plants may the propagator expect to obtain best results.

Up to recent years severe selection was not so necessary, because most insect and fungus disorders were quite apparent and for the most part could be controlled. But research has shown that many of the varieties grown commercially are virus infected. Unfortunately, almost all commercial varieties do not show the colour symptoms normally associated with this disease; that is, they are symptomless-carriers. Although no colour symptoms are shown, certain varieties do exhibit abnormalities when virus infected, such as reduction in vigour, reduction in yield and cessation of runnering, signs of the running-out of the variety.

Plants for a new strawberry plantation should never be taken from an old fruiting plantation because these plants have been growing in crowded conditions making

them accessible to the virus vector (carrier). A special propagation row should be started, which should not be just an extra row in the fruiting plantation but a separate row isolated from existing plantations.

As the disease is carried in the cell sap of the plant, all runner plants will carry the disease. For this reason wider spacing within the row to keep the runners from each clone separate, or a special block system of planting should be adopted for ease when roguing. The block system consists of setting the strawberry plants on the corners of an eighteen inch square with three feet between the squares. Only plants which appear to be disease free should be set out and future roguing should be systematic, thorough and severe. It is not a matter of discarding the poorer and saving the better, but retaining only the best. It is important to remove all runners as well as the parent plant, and with the block system, the entire block should be removed. In this manner the performance of the variety should be improved and the desired fruiting and vegetative characteristics retained.

Grassland Farming Produces Quality Feed

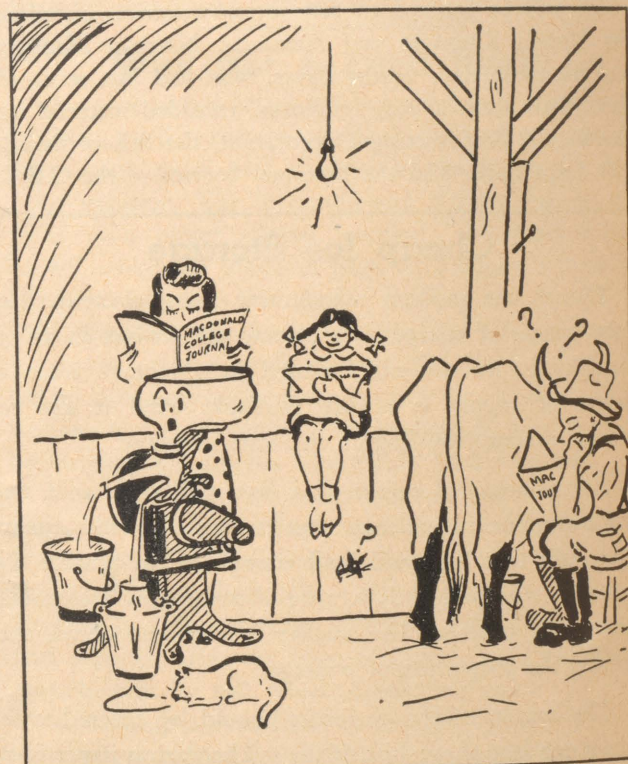
A popular topic for discussion by farmers and agricultural workers in Eastern Canada is grassland farming. Livestock producers, faced with increased cost of feeds but who can use grass and legume crops, are showing more and more interest in grasslands. This is undoubtedly stimulated by evidence that high quality roughage feeds can be produced where grass is treated as a major crop.

With proper fertilization and good management, pasture and hay yields can be increased economically. Results of long term experiments in many localities have confirmed this. The correct utilization of grass crops, pasture, hay and silage is, therefore, most important.

Good pasture is the ideal roughage and livestock on abundant, well managed pasture require no other feed. Hay and silage are basic feeds in winter rations but they usually require a concentrate supplement, if maximum yield or gain is to be obtained. Where palatable, high protein hay and silage are fed, the more costly concentrates can be fed in smaller amounts or in less expensive mixtures with home-grown grains. In this way feed cost is reduced bringing greater profits.

A grassland program and the high quality roughages produced from it, is a good answer to rising costs of livestock and livestock products.

Weeds allowed to grow and touch the wire of an electric fence will grounds the fence and reduce its effectiveness.



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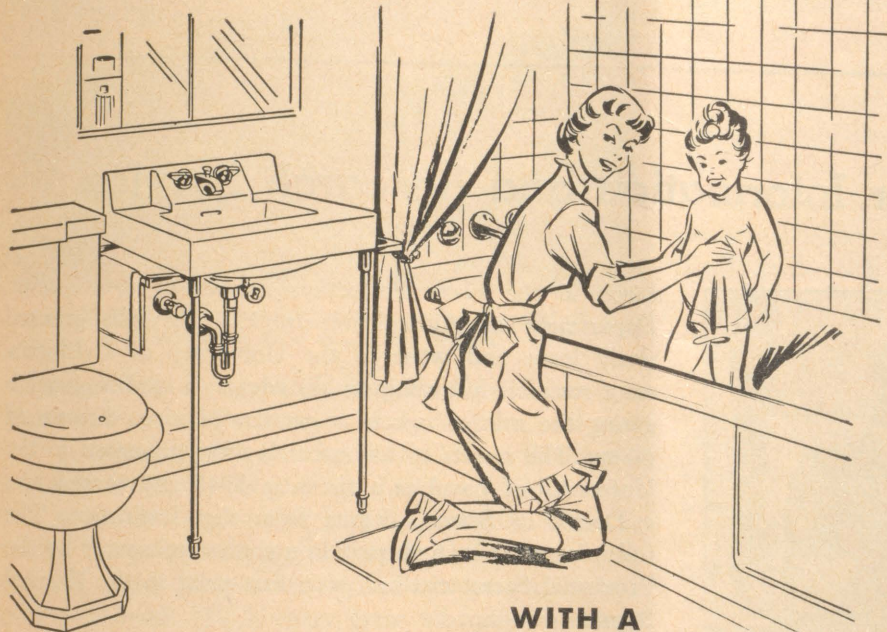
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DEPARTMENT OF AGRICULTURE

*Activities, Plans and Policies of the Quebec
Department of Agriculture*

New Director For Information and Research Service



Dr. Maheux (left) turns over the keys of his office to his successor, Dr. George Gauthier.

After thirty-six years of service in the Department of Agriculture, Dr. George Maheux has retired from his post of Director of the Service of Information and Research.

Dr. Maheux was appointed to head the newly created Information and Research Service in the spring of 1943, leaving his post as Director of the Plant Protection Service to do so. After eight successful years he has now given up his active part as a member of the provincial staff, but will continue with his teaching duties at the University of Laval. His summer job, and one on which he expects to keep busy day and night, is to organize the centennial celebrations of the University.

Succeeding him is the man who took over as Director of the Plant Protection Service in 1943, Dr. George Gauthier. A native of Baie St. Paul, Dr. Gauthier graduated in agriculture from Ste. Anne de la Pocatiere, then, having been granted a bursary by the province, he went to Cornell and obtained his Master of Science degree. On his return to Canada he was appointed chief of res-

earch in the Plant Protection Bureau of the Quebec Department of Agriculture. In 1938 he was granted study leave and went to the University of California on a research fellowship to do advanced studies, investigating the role of insects as carriers of virus diseases of plants. The results of his research were presented to the University of Laval as a thesis in 1943 and earned him a Doctor of Science degree from that institution. The following year he took part in a contest sponsored by the Provincial Secretariat and won first prize in the Natural Science section.

His career with the Department of Agriculture has been marked by the assumption of increasingly important responsibilities. He has represented the Department at many national and international entomological meetings where he presented papers dealing with the research carried on under his direction. He is the author of a number of scientific papers and has written many popular articles on plant protection.

He is a member of a number of scientific and professional societies; director of Acfas, of the Entomological Society of Canada, of the Quebec Society for the Protection of Plants and of the Zoological Society. He is a past president of the Corporation des Agronomes de la Province de Quebec and of the Linnean Society, and a member of the following: The American Association of Economic Entomologists, the Entomological Society of America, the Biological Society, the Pomological Society, the Quebec District Entomological Society and the Natural History Society of Ste. Anne de la Pocatiere.

He has served as Secretary of the Agricultural Research Committee since 1947, and was recently named chairman of this important organization.

Members of the staff of the Service gathered at Quebec in April to bid farewell to Dr. Maheux and to make a presentation to him as a memento of his long association with them.

Tobacco Can Be Profitable



This particular irrigation system earned the cost of installation in a single dry season.

The growing of cigarette tobacco in Quebec has been encouraged by the Department of Agriculture, and since 1937 the sandy soils around Joliette, Three Rivers and several other areas in the St. Lawrence Valley have been profitably employed in growing this crop. Cigarette tobacco brings in a revenue of about \$1,750,000 a year, and this comes from some 4½ millions pounds of leaf. In 1951 almost 150 farmers grew tobacco on a large scale on a total acreage of 5,467 acres. The Quebec product has a distinctive aroma that is popular with manufacturers, who would be glad to get more tobacco here, and it is estimated that we could grow as much as 18 or 20 million pounds a year.

Most of the leaf is handled by a central organization, the Laurentien Tobacco Co-operative, founded at Joliette in 1938, which has its own processing plant. Members bring their crop to the plant where it is graded, dried and then packed and sold.

Tobacco does well in the sandy soils of the province provided there is at least 2% to 4% of organic material in the top layer. It takes a fair amount of equipment which would not be found on every farm; hotbeds to start the young plants, artificially-heated dryers which must be operated by experienced men, and fertilization and general cultural practices must be well understood. Tobacco is usually grown in a two-year rotation with rye, which is plowed down for green manure.

Tobacco is susceptible to wind damage, and permanent windbreaks are in common use, usually of conifers. Some twenty farmers so far have installed irrigation systems to keep the moisture level constant, and while these are expensive to install, instances have been known of a farmer paying for his whole installation in one dry season.

Tractors can be a farm fire hazard. Keep them well serviced and observe safety rules at all times.

We Don't Sell Enough Maple Syrup

"Although we are tapping only half the maple trees we have, the Province of Quebec accounts for 85% of all the maple products produced in Canada. Quebec farmers collect more sap than farmers in all the United States. We tap about 21 million trees every spring, but there are about 40 million that could be tapped. We need to increase our sales, for while the population of Canada is growing, consumption of maple products seems to be falling off."

This is the way Jules Methot sees the situation, and he should know, as he is chief of the Honey and Maple Products Division in the Department of Agriculture.

There was a time not long ago when we were in danger of having the American market closed to our maple products. Old-time sap buckets were soldered with lead solder, and tiny amounts of this lead dissolved in the sap, leading to a danger of lead poisoning. Then, there were the unscrupulous people who tried to stretch their income by adulterating the syrup and sugar with other forms of sugar. This was soon stopped by the vigorous action of the Minister of Agriculture, who realized that faith in the purity of Quebec maple products was of the utmost importance.

The Department, with the help of the Federal authorities, also did something about the lead solder. They initiated a programme of exchanging old buckets for aluminium ones, paying a grant to any farmer who brought his old, lead-soldered buckets in for exchange. So far, 13,000,000 aluminium buckets have been passed out, and the Department is urging that any farmer who has not yet taken advantage of the offer do so as soon as possible, as this may be the last year that this grant is available.

Lead solder should also be avoided in making other sugar bush equipment—evaporators, and so forth. There are solders on the market which contain no lead and which are easily obtained by the manufacturers.

Packaging practices are changing in many lines, and the same is true of maple syrup containers. We have been used to the familiar gallon tin for years past, but it is far from being the most satisfactory, especially for family use. That wonderful maple aroma soon disappears from an opened tin, and there are not many families that can use up a gallon of syrup in a few days. The solution seems to be the use of the 26-ounce can; a handy size to store on the grocery shelves and in the housewife's pantry. The smaller can could sell at a lower unit cost, and will preserve the flavour and aroma indefinitely so long as it is not opened. A number of operators are putting their syrup up in small cans, and it will likely not be long before the gallon tin becomes only a memory to most people.

Beef Cattle Sold At Sherbrooke

The Quebec Beef Cattle organized its second annual spring sale in the Arena at Sherbrooke on April 18th and disposed of 67 head of the three beef breeds for an average of \$441. This was a bit below the prices for the 1951 sale, when the average was \$456, and while the bidding was spirited enough on the better animals, in a great many cases the auctioneer, Larry Merrigan of Cookshire, worked hard for his bids and the sale tended to drag at times.

The Hon. Patrice Tardiff was on hand to open the sale and to represent the Department of Agriculture, and the buyers and consignors were welcomed by a few words from Col. D. B. Lyon.

High price at the sale was \$1,075 paid by M. T. Stenson of Sherbrooke for Jarvis British Mischief, bred by F. W. Reicheld of Jarvis, Ont. Mr. Stenson paid \$1,000 for another Jarvis Hereford, and bought three others at lower prices. J. P. Fleury bought five Shorthorns for his junior calf club work and Wes. Nichol of Lennoxville was another consistent buyer.

Breeders from Ontario came to the sale with the only Angus cattle that were offered and also brought some Herefords and Shorthorns. This was in the way of a good-will gesture, at the urging of their breed associations and prices received at the sale were probably lower than the same animals would have brought at home.

One criticism was that there was little chance for many would-be buyers to get a good look at the animals before the sale. To remedy this, it is proposed, for future sales, to have the cattle judged on the morning of the sale so that everybody will have the chance of seeing them and deciding what they like under the best conditions.

Many of the bulls sold carried a provincial bonus, which might be \$10, \$25 or \$35, depending on his age and score, and the Quebec Beef Cattle Association offered

a further bonus of \$50 to the purchaser of an approved bull of any age or breed, provided the purchaser lives in Quebec and guarantees to keep the bull for at least 24 months. With these bonuses, a buyer who bid a bull up to \$485 might have to put out only \$400 in cold cash.

Mr. Tardif, in his opening remarks at the beginning of the sale, mentioned that the Department of Agriculture is keenly interested in beef work in this province, and sees in this sale a splendid chance for farmers to improve their beef herds.

All the cattle sold were from T.B. free areas and some of the herds they came from are accredited. All had been blood tested for Bang's Disease within 30 days of the sale and all had been inoculated for shipping fever.

The Sales Committee consisted of Messrs. J. P. MacIntosh, Ross Edwards, D. B. Lyon, W. Nichol and C. McClay, with D. J. MacMillan as Sales Manager.

Two Great Bulls At St. Hyacinthe

There are two AAA bulls among the Ayrshire sires in service at the Artificial Insemination Centre at St. Hyacinthe; two of the four highest qualified bulls of the breed in Canada. Neshaminy Salty 315052 is listed No. 1 in Advanced Registry, AAA class, and Castelmont Cerutti Lib-Rog-312905 is listed No. 4.

Exceptional qualifications are required for such a rating. The bull must be of excellent conformation and must come from a long line of parents highly qualified in milk and fat production. Very few attain it.

Castelmont Cerutti, now five years old, is a son of Penhurst Mr. Liberty, who sired 87 daughters whose average production is 10,254 pounds of milk and 428 pounds of fat (4.17%). His dam was Rogante de Pilote, bred at Ste. Anne de la Pocatiere. She has nine official records averaging 12,738 pounds of milk and 488 pounds of fat. With a total production to date of over 114,000 pounds, Rogante de Pilote had her best year when she was ten, with 15,861 pounds of milk and 550 pounds of fat.

Cerutti, on his sire's side, has a large number of remarkable sisters, and his grandparents possessed many excellent qualifications.

Salty has the same blood in his veins, though through a different descent. He was born in 1946 and, still very vigorous, seems to improve steadily as he grows older. Twenty paternal half-sisters have averaged 11,358 pounds of milk and 504 pounds of fat. His mother consistently produced over 10,000 pounds in her normal lactations.

These two bulls were selected by Department of Agriculture officials after long study of their pedigrees, and it is hoped that they will remain in service at the Centre, to the benefit of all farmers who make use of its services, for a long time.

Knowing the breeding history of animals used for breeding is a good rule.



Bidding was brisk on the better animals, but the auctioneer worked hard for most of his bids.

Sugar Beets — A Profitable Crop

The growing of sugar beets on a large scale is relatively new in Quebec, but this crop is here to stay.

Starting modestly some years ago, after the building of the refinery at St. Hilaire, at which time the organizers of the refinery set 10,000 acres as the goal for profitable operation of the plant, the 1951 crop of beets was 96,711 tons, harvested from 13,287 acres, mostly in the four counties of St. Hyacinthe (39,297 tons), Napierville (14,300), Bagot (8,933) and Vercheres (5,594). And about 410 farmers received cash payments of more than \$1,000 for their crop.

The Canadian production of sugar beets in 1951 was 963,000 tons, grown on a little over 93,000 acres. Yields per acre have been steadily increasing, and whereas back in 1911 the national average yield was 8.46 tons, today's average is up to 10 tons. Many Quebec farmers better this, however, getting anywhere from 12 to 18 tons to the acre, and the average for all Quebec producers is about 10 tons.

Sugar beet production is organized in Quebec in such a way that very little capital outlay on the part of the grower is called for. The refinery sells him his seed, taking payment when he delivers his crop. He can rent any machines he needs from the factory, and they will even advance him money to get his crop delivered, deducting these advances from his final settlement. The factory will also guarantee loans for him from the local bank or credit union to pay wages during the summer.

The farmer can be sure of getting at least \$13 a ton for his beets from the factory in 1952, and if conditions warrant it, there is every likelihood of a further bonus being paid later in the season.

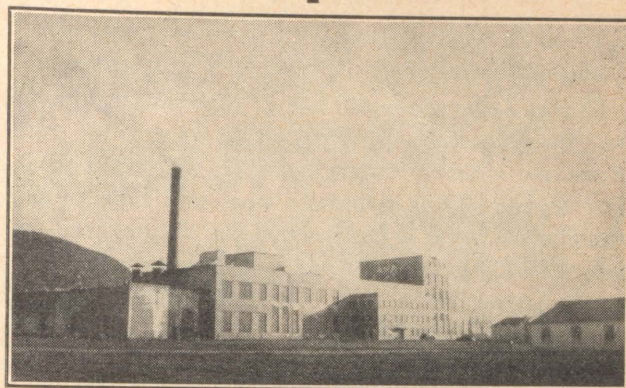
According to the experts in the Department of Agriculture, sugar beets are easy to grow, provided certain precautions are taken. For instance,

1. The soil must be well prepared in advance and thoroughly freed of weeds.

World Food Situation

It is estimated by experts of FAO that the aggregate production of the principal food crops both in 1951 and 1952 will be slightly above that of 1949-50, and about nine per cent greater than the pre-war period of 1934-38. Since 1936 the estimated world population has increased by about 13 per cent. As a result current supplies per capita were even below the unsatisfactory pre-war level.

The increase that has occurred has not been uniform between the various regions. Although there has been a substantial increase above pre-war levels in some countries, particularly in the surplus-producing regions, production in many European countries and those of the Far East are still below pre-war. Consequently those people who were well nourished at that time have as



The St. Hyacinthe sugar refinery receives beets from a wide area.

2. Seeding must be done carefully, and the seeder adjusted to feed at the proper rate and set the seed at the proper depth for good germination.

3. Thinning is most important, and it must be done at just the right time, when the small plants have developed three or four leaves and are firmly anchored in the ground. About 90 to 100 plants should be left in every 100 feet of row. Thinned thus, a field will yield from 2 to 4 tons more than one in which the plants have been thinned out to 65 or 70 plants per 100 feet.

4. The soil must be kept worked during the growing season to keep down weed growth and to provide a mulch to prevent drying out of the deeper soil. Frequent cultivating will keep heavy soils from drying out and crusting and will help the roots to develop properly. Cultivating should be kept up until the tops are too big for the cultivator to pass along the rows.

Sugar beet production has put many extra dollars into the pockets of Quebec farmers living within reach of the refinery and the more they learn about growing the crop, the larger their revenues are likely to be.

much or more food than before, and those who were hungry then are even hungrier now. This means a continued and greater dependence on the countries of the Western Hemisphere as a source of supply for many foods.

The importance of early seeding of barley has been shown in experiments over a period of three years at Ste. Anne de la Pocatiere Experimental Station, Que., where the highest yields for various barley varieties were secured from early seeding. The yield decreases arising from late seeding varied considerably with varieties, Montcalm barley being one of the least affected by late seeding while the variety Mensury was seriously affected by late seeding.

Good Seed — Good Crops

We reap what we sow, and if we sow poor seed we should not be astonished if we reap poor crops.

Quebec farmers are still not all convinced of this. Last year the Department of Agriculture went to the trouble of making a survey to see just what the farmers had in their seeders. Their inspectors went into three counties, where yields were about average for the province—perhaps a little better than average. They took samples of seed right out of the drills in the field, and sent them to the seed laboratory for analysis. And what did they find?

No less than 62% of the samples graded No. 2 or No. 3, and some were absolutely unsuitable for seeding. With seed like that going into the ground, small wonder that our average grain production per acre is scarcely 25 bushels.

Just what is good seed? Good seed is registered seed of a good variety, grading No. 1 seed. If the seed is grown on the farm, it must be cleaned and treated against disease.

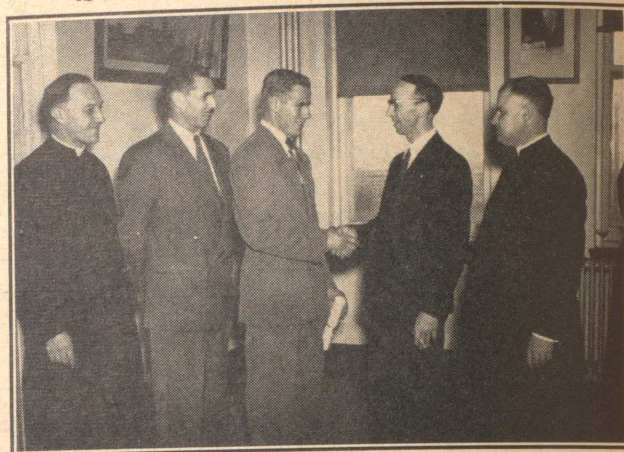
Plant diseases cause losses amounting to several million dollars in this province every single year. Smut, alone, cuts down the yield by from 5% to 10%, which means a loss of crop worth three to five million dollars. Rust can reduce yields by from 15% to 20%, double that of smut loss. And with all the other diseases which are found in our crops, every farm in the province is probably losing a hundred dollars needlessly every year.

The variety we choose has a lot to do with the yields we get, and the thing to do is to plant a variety that is adapted to conditions on the particular farm. The agronomist has this information and is eager to pass it on. When fields become infested with weeds, complaints are loud and many; but it can scarcely be otherwise, so long as farmers continue to sow seed that has weed seed in it—as any seed will that has not been cleaned and re-cleaned.

Mr. Pierre Labrecque, Director of the Livestock Service for the Department, has been re-elected a director of the Royal Winter Fair, to be held in Toronto from November 14th to 22nd. The Minister of Agriculture and the Deputy Ministers are also members by virtue of their positions. Mr. Labrecque is the official spokesman for the Department of Agriculture of Quebec on the fair board.

Yes cows have a sweet tooth too! It has been found that they are much like humans in this respect—they have a weakness for sweets—sweet grass. It has been determined that cattle favoured grass higher in sugar content than the grass they passed up. This means pastures should have a high phosphorus content. Plants high in phosphorus always contain more sugar than plants with a phosphorus deficiency.

Ste. Martine School Closes



Gilles Bissonnette, the chief prize-winner at the Ste. Martine School, is congratulated by Principal April.

The Agricultural School at Ste. Martine held its closing exercises early in April, just about the time that the students were getting anxious to get home and start in with the spring work, putting into practice on their home farms some of the principles they had learned during their two-year course.

Among the invited guests were J.-Paul Lettre, inspector-general of agricultural schools for the Department of Agriculture, representing the Minister of Agriculture who was unexpectedly detained at Quebec; Arthur Laberge, M.L.A. for Chateauguay; George Michaud, agronome, of Hull; all of whom spoke briefly. The principal address was given by Mgr. Caza, Bishop of Valleyfield.

Gilles Bissonnette of St. Polycarpe was the chief prize-winner, graduating with very great distinction and carrying off, literally, an armful of prizes of various kinds; books, tools, materials and cash. Nineteen other second year students were granted diplomas and prizes. The valedictory address was ably delivered by Andre Bernard, also of St. Polycarpe.

53 Bonus Bulls For Quebec County

During the past year the Quebec Department of Agriculture has been successful in placing 53 registered bulls with farmers of Argenteuil county, largely through the efforts of Alex Bothwell, popular agronome for the county, who personally interviewed most of the farmers who wanted bulls and inspected many of the animals purchased.

Mr. Bothwell had to visit each purchaser, or see him at the office, so that the application for the Quebec bull bonus could be made. The province pays \$10 bonus for a bull calf and up to \$35 for an AA or XX animal.

In all, 22 Ayrshire bulls were placed during the year, 13 Holsteins, 13 Shorthorns, two Herefords, two Angus and one Jersey. Each of the beef bulls had to be inspected and scored by Mr. Bothwell.

Strippings

by Gordon W. Geddes

Hans and Martha moved into a small house about four miles away until they could decide what to do. At 8.45 one night we got a telegram for Hans and went back with it. It was about a job in Ontario. A few days later they moved to Ontario but not to that place. Perhaps we shall not see them again but we shall surely hear from them. Martha lost her wedding ring when she was here and George has already found it. He has never seen her but he certainly made her happy when he found it as they took it quite seriously.

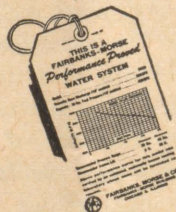
We had quite a sugar season this year. Perhaps it could be well described as short and sweet. After we started tapping the sap was running and we gathered at once. Three and one-half weeks after we started to gather, we turned the buckets down for the finish. But we had made the most syrup we have made in a season. We expected an easy time with the extra boy but it came so fast we were quite rushed. Mac learned to run the milker by the time it got going so I stayed to boil and the sap was all boiled every night before I left the camp. Where the hemlocks were cut for pulp last summer, the maples ran sap much better. It was always so cold before that we didn't get much in that end. If we cut the rest of the hemlocks we could really sugar but Dot thinks we should leave some of them or we wouldn't be able to keep up. But George likes it better when there is lots of sap to gather though he was a bit handicapped the first part of the year by being a total stranger in our woods. He hadn't even been in to cut any wood. Another handicap to fast gathering was the great depth of snow though it probably contributed to our big crop. We never gathered so little in the rain though it stormed enough when we were not gathering to make us glad we had some covers. Next year we intend to have the rest of the

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covers made. This year was the first one for some time that we made no covers to increase our supply. It was also the first time that I didn't see the R. O. P. inspector the night he arrived. When he came I was boiling and he was in bed before I finished. Last night I boiled until 1.30 a.m. thinking I was done sugaring but tonight it looks like a real freeze.

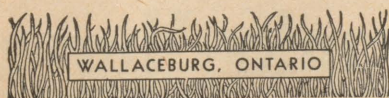
Anyway we proved that we can make sugar on a February moon. Those who believe in the supernatural powers of the moon said that sugaring

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would be very late since the February moon lasted until almost the end of March. We hope there is no more truth in the old belief that a robin in March means a bad spring for they showed up here on March 30 with the bluebirds and blackbirds visible the next day. One year we saw the first bluebirds on March 18 but it was a bad spring later. Dot has been seeing big flocks of juncos such as we haven't seen for some years. And, of course, on April 1st there were all kinds of strange birds and beasts around. Only they were so fantastic that everyone remembered what day it was. I did take unfair advantage of Mac the other day. He sent by me for some flashlight batteries and I substituted used ones. He soon caught on for they didn't make a very good light.

Wesley Bryan, whose father old readers will remember as Ivan, has been to visit us lately. Wesley was only six months old when his father started here and three years and one-half when he finished so he feels quite well acquainted. Now he is an old man of nearly five years and quite grown up. He has been gathering sap and carrying wood in grand style. He was quite pleased because one of our cats had four kittens born on Easter Sunday all ready to show him. There are two yellow ones which Dot has been looking for in every batch born for years. Wesley wanted to name them so we now have Sunshine, Ginger, Blackie and Pattie.

We have been feeding grass silage twice a day for some time to finish it before the pasture season. It seemed as if we got more milk when we changed to the extra feed of silage. We shall have a lot of hay left over too but that is easier to keep over than silage. However, if this is any kind of a hay year we should have a lot of it again as we have thirty acres of hay and eleven of pasture top-dressed pretty heavily. But it isn't safe in this country to sign a contract to sell ten or twenty tons of surplus hay until you get it grown. If we get a sudden dry spell it can reduce the

crop pretty fast. But one also needs to plan for a place to put the crop if you do get it. We really don't plan to sell any but we may have a home market if the embargo stays on cattle to the U. S. and we have to milk all our heifers. Of course we cannot milk all those bull calves we raised from tested dams for the same market but we also have a home market for some of those. Dot and Thera, George's wife, have just been canning one that dressed a hundred pounds. The hide was worth only a fraction of what it was a short time ago but the meat will be worth quite a lot for home consumption because of the difference in what the farmer gets for meat and what he has to pay if he buys it retail. Perhaps it will be better for farmers in the long run if hides are cheap as there will not be so many people after the farmer's hide if it is less valuable.

Our Cover Picture

The average Canadian may not connect farming in England with air-borne sprayers, but our cover picture, taken in England, proves that they are keeping up with the times.

The farmer who owns a wood-lot with a vigorous stand of trees has a valuable resource for low-cost farm building construction. If he cuts his own lumber and hauls it to the mill himself, it may be possible for him to effect a saving, sometimes as much as three-fourths of the cost of commercial lumber.

A farm wood-lot is only as valuable as its resources are protected and husbanded. If, in planning to harvest construction needs care is taken to select only those mature trees which should be cut, and if species to meet specific building requirements, only, are chosen, the farm wood-lot can continue to yield a revenue year after year, thus assuring the farmer of a supply of lumber in the years ahead.



THE WOMEN'S INSTITUTES SECTION

*Devoted to the activities of the Quebec Institutes
and to matters of interest to them*

Conservation Of Our Forests

Constance R. Dufresne

A good woodlot is one of the best types of security a farm family can have. Good management of wooded areas, and efficient cutting of timber would eliminate much of the waste which now exists, and yields could be stepped up materially without cutting a larger volume than can be grown each year. Trees, like every other living thing, are born, grow up and die. The owner of a woodlot naturally wants to get as much revenue as possible and each year he should go over it carefully and pick out and have cut those trees which are diseased or have stopped growing. This should be done as soon as possible as the wood begins to deteriorate and the value diminishes rapidly.

The most profitable trees are the tall straight ones. To get them the young growth should be allowed to come up thickly at first and as it gets taller it should gradually be thinned out, always leaving the best specimens as "crop trees". These crop trees should be carefully watched and cared for and such attention will pay well in the quality of lumber produced. It is easily seen that a tree with three or four good sixteen foot logs has far more value than one with only one or two logs.

Here are several "don'ts" which should be remembered by all who wish to implement a good timber land management program:

(1) Don't make your woodlands do double duty by using them for pasture. Undergrowth is destroyed and young trees eaten off.

(2) Don't cut trees in your woodlot indiscriminately. Cut wisely, so new growth is coming along at all times. Cut mature trees only.

(3) Don't clear marginal and sub-marginal land for use as pasture or crops. Much of this land will not give as high returns under cultivation as it would under good forest management.

(4) Don't damage your remaining stand when removing mature timber. Such damage discourages reproduction and growth.

(5) Don't hesitate to ask for assistance and advice regarding the reforestation of eroded land. Such land eventually will return a dividend. In addition, it will conserve water supplies, prevent soil erosion, maintain wild life, and provide additional recreational facilities.

Farmers can now get free advice from district foresters on woodlots, just as they can from agronomes on farming. We can get this information, decide what we can

CONVENTION DATE

The Annual Provincial Convention of the Quebec Women's Institutes will be held June 24-26.

The annual board meeting will hold opening session on Monday, June 23 at 2.00 p.m. and carry through until Tuesday evening.

Full information will be found in the programmes sent to all delegates.

do about it, and set up a plan of operations. Once we have started to put this plan into effect we'll probably find some changes that need to be made. Well, there is no law against improving a plan; but unless we have one we can't improve it.

Quebec grants forestry awards. Each owner of a woodlot not exceeding 300 acres, or a sugar maple tree land not less than seven acres, could enter these contests. Many did, and achieved success in the farming of their woodlot.

Second highest company reporting a reforestation program in Canada is the James MacLaren Co. Ltd., of Quebec, a pulp and paper firm. Planting began in 1939 and 420,000 trees have been planted on 350 acres (logged over, scrub and abandoned farms). Planting stock came from the Quebec Government nursery at Berthierville. Some Power companies are carrying out big reforestation programs. An outstanding example is the Southern Canada Power Company, which has planted over a million trees on 813 acres of land in Quebec. This company operates its own nursery. Another power firm, the Saguenay Power Company Ltd., is planting thousands of trees in its plan of returning holdings in the St. Johns' districts of Quebec to good forest land. This company also started its own nursery, and it is expected to yield 400 to 500 seedlings per year.

Even if we have very little money, we may be able to work out a program which will lead to success. This has been done a good many times before now.

The process, then, in working towards ideals, is to plan our approach and keep the plan constantly in the back of our minds. Given this approach and a reasonable life span, there is no reason why any farmer should not be able to succeed in at least one part of his plan—building up a better farm. And if he relates this constantly to other parts of his program he will probably succeed very well in building up a better way of living for himself and those who will come after him.

(Conservation in all its aspects is a watchword of the W.I. from the international organization down through to each local branch. At the last Q.W.I. semi-annual board meeting reforestation and the care of woodlots was touched upon and Mrs. Dufresne, the provincial convenor of Agriculture, undertook to get some data on this subject. Two new pamphlets have now been added to the Q.W.I. loan library: 10-P-13 Care of Woodlots; 10-P-14 Woodlots for Profit, Comfort and Protection.)

The Month With The W.I.

Stock-taking month! Annual meetings—crammed with reports of projects completed and new ones to be planned. The Q.W.I. is still “rolling along”, as the news this month will show.

Argenteuil: Arundel voted \$100 to the town for the purchase of a fire siren and had two more streets lights installed. Brownsburg members are taking nursing and art courses, the latter instructed by Miss Campbell. Money was donated to Scout and Guide committees. Frontier sent a floral spray to a bereaved family and Mrs. I. Fuller made a quilt for the Red Cross. At Lachute Miss Bruneau gave a course in felt work. Mrs. George Deacon thanked the retiring officers and stressed the interesting programme throughout the year. Lakefield voted \$5 to the Red Cross, sent a box of clothing to Save the Children and a box to a family overseas. Mille Isles made donations to the Q.W.I. Service Fund and the Boy Scouts. A food parcel was sent to England. Morin Heights held a glove and slipper making course under the supervision of Miss Bruneau. Members attended in a body a memorial service for the late King. Pioneer pieced a rose quilt at the annual meeting. Jerusalem-Bethany installed the officers with Mrs. H. Todd as president. \$10 was voted to the Red Cross. Upper Lachute and East End made donations to Lachute High School and School Fair. The overseas parcel was sent.

Bonaventure: Black Cape made plans for future activities at a busy annual meeting. Grand Cascapedia held their annual meeting at the home of Mrs. Fred Barter. Shigawake made plans for a treat for the children. New Richmond is interested in improving conditions under which the Health Unit operates. Port Daniel held an active annual meeting at the home of Mrs. Charles Dean. Restigouche heard annual reports and outlined work for the coming year. New Carlisle, at the 30th annual meeting, welcomed five members from the Junior Institute and presented Miss Leila Chisholm, winner of the design for a junior pin contest, with \$5—the provincial award.

Brome: Austin held its annual meeting in the community hall. A questionnaire re: the turkeys poults received last year, was filled in. Knowlton's Landing sent

a similar report on turkey poults. A surprise parcel was sold and the monthly card party held. Abercorn entertained the county president who gave a most interesting talk. South Bolton held two parties in the new club room. A pair of socks was sold to raise funds for the travelling library. Sutton, at the annual meeting, had a special sale of a surprise parcel.

Chat-Huntingdon: Aubrey-Riverfield and Howick report a very successful public speaking contest held in Howick High School. There were 33 entries. Franklin Centre made plans for a public speaking contest. A quilt, made by a member, was on display. Hemmingford made plans for a First Aid course and donated \$5 to the Q.W.I. Service Fund. Ormstown sent a letter of congratulation to Miss Margaret Dickson, Ormstown, the first winner of the Watt Memorial Scholarship. A play, “No Soap”, was presented and \$5 voted the Senior and Junior Red Cross. A “Dresden Plate” quilt, completed by the members, is to be sold. Huntingdon had a demonstration by Mrs. Carl Anderson on a puff cushion cover.

Compton: Bury received acknowledgment of socks, sent from the exhibit at Cookshire Fair, to two girls in France. The sick and shut-in were remembered. Brookbury presented a knife and fork set to a member's baby and remembered the oldest members with a plant. Several card parties and dances have been held. Canterbury gave two birthday parties for members. Eight parcels, each valued at \$8 have been sent overseas. Sawyerville presented a gift to a member for a perfect score in answering rollcalls. \$5 was voted to the Red Cross and \$5 to the Q.W.I. Service Fund. Scotstown donated 35 cents per member toward the county scholarship. A film on South Africa was shown.

Gatineau: Aylmer East is making plans for entertaining the annual county meeting. Kazabazua reports receiving a donation for school fair prizes from Wright W.I. Seeds will be given to the school children again this year. Help was given a family who recently lost their home through fire. A contest, with prizes, on “Necessary Articles in a First Air Cabinet”, formed part of the programme. Eardley voted \$10 to the Red Cross drive and sent a gift to an elderly shut-in member. A poem, “Plenty to Give”, was read. This was the 33rd annual meeting of this branch. Rupert had another successful year. A chenille bedspread is to be sold in aid of branch funds. Wakefield reports the sum of \$213 was realized from the sale of a silver fox neckpiece, which will be donated to the hospital. The branch sponsored the Red Cross drive, raising over \$200. A member of the school staff gave a talk on “Parent-Teacher Relations”, and suggested ways in which parents could assist in bettering schools. Wright voted \$5 to the Canadian Institute for the Blind. A report was given of the opening of the new hospital at Wakefield, a project that will fill a great need in Gatineau county.

Jacques Cartier: Ste. Annes voted \$45 for overseas parcels for the next few months, and \$10 to the MacDonald High School Library. A bed jacket was sent a member ill in the hospital. Birthday bags are to be given to each member in the month of her birthday—she “pays her age” in pennies.

Megantic: Inverness welcomed two new members. A large quantity of white cotton was sent the Cancer Society and the overseas parcel was packed.

Missisquoi: Dunham heard the branch history read by the Publicity Convenor. Plans were made for a rug-making course given by Miss Bruneau. Fordyce received two letters of thanks from an Austrian family who had received the Christmas parcels sent by the branch. A quilt block was donated as pattern for the Tweedsmuir Competition. Stanbridge East sent books to the St. Hyacinthe Hospital and linen to the Cancer Society.

Papineau: Lochaber reports much activity. Every two months the Publicity Convenor sends detailed reports of W.I. work to the local paper.

Pontiac: Bristol Busy Bees heard a paper on “Our New Governor General, Vincent Massey”. Clothing was sent to Save the Children. A class in sewing under the supervision of Miss Campbell was found very profitable. Beech Grove had a busy annual meeting and heard reports of an active year. Elmside branch is making a quilt. Fruit was sent to the hospital and clothing presented to “new” twins in the community. Fort Coulonge enjoyed a contest conducted by the president. Two new members were enrolled and a polio penny race drive was conducted. Clarendon received a thank you letter from Miss Doris Hayes, winner of the Institute scholarship (\$25). The sum of \$5 was donated to the Cancer Society and \$10 to each of the cemeteries in Shawville. Wyman entertained the Elmside W.I. The programme featured a talk and demonstration by two representatives of the C.I.L. Paint Company.

Richmond: Cleveland welcomed a new member and another member, leaving the vicinity, was presented with a gift. An overseas parcel was sent. Dennison's Mills sent a gift to the honorary president, Mrs. T. Demers, who celebrated her 90th birthday. Still an active member, Mrs. Demers attends many meetings. At Gore a white elephant sale of remnants, received from various companies, was held. Sunshine boxes were sent to four children who were ill and a gift went to a child in the hospital. Donations were sent to the Red Cross and the Q.W.I. Service Fund. Melbourne Ridge appointed Mrs. E. Nelson and Mrs. L. Driver to complete the branch history. A card party, proceeds from which went to the W.I., was held at the home of Mr. and Mrs. G. Frank, and a donation was made to Greek Relief. Richmond Hill held a shower for a bride-to-be and gave donations of \$10 to March of Dimes, \$5 to the Red Cross and \$5 to the Cancer Society. Richmond Young Women's are giving a prize of \$5 to a pupil of Grade XI at St. Francis College for greatest improvement during the



Members of the Melbourne Ridge Women's Institute gathered at the home of Mrs. George Stainthorpe for a meeting.

term. A donation was made to Greek Relief. Windsor Mills voted \$10 to the local Brownies to buy two uniforms. W.I. members donated food for the Girl Guides food sale. Miss M. Campbell was the winner of the International cookbook.

Shefford: Granby Hill voted \$10 to the Red Cross. Five scrapbooks were sent to the Bondville Home. South Roxton drew up the new programme at a busy annual meeting. Warden reports five members had perfect attendance during the past year. Two new members were enrolled. At their meeting the Warden Juniors planned a sugar social. Junior W.I. sweaters have been ordered.

Sherbrooke: Ascot donated money to the soup fund at the Ascot Consolidated School and replenished the First Aid Kit. Silver spoons, to be given the first three patients in the Sherbrooke County W.I. Children's ward at the New Hospital, were on display. The convenor of Welfare and Health had a quiz on “The Parts of the Body”. Mrs. W. Winget, convenor of Agriculture, gave the monthly broadcast, speaking on “Planning the Home Garden”. Belvidere entertained at the county meeting. At the branch meeting the convenor of Welfare and Health was made a member of the Cancer Society. Mrs. George Wells was presented with a life membership certificate and pin by the county, in recognition of her splendid service as convenor of the lunches served at the school fairs for some years. A demonstration of Ronald Nylon Products was given. Brompton Road heard an article, “A Dedication to the Home”, read by the publicity convenor, Mrs. H. Riches. Mrs. Stuart Billings in her talk on “Empire Happenings”, expressed the pride felt by members of the branch upon hearing that a local young man, Flt. Sgt. Merton Brown R.C.A.F., now in England, was one of the Canadians chosen to be a member of the Canadian Armed Services Detachment to attend the funeral of King George VI. Lennoxville held a card party to raise the sum promised to the High School Building Fund. Used linen for the Cancer Society was collected, money voted to the Watt Memorial and \$10 for School prizes. A parcel post sale, conducted by Mrs. Stuart Cairns, aided branch funds. A quiz was conducted by Mrs. Carl Leonard, convenor of Welfare and Health.



THE COLLEGE PAGE

The Macdonald Clan

Notes and News of Staff Members and Former Students

Mac Grad In The News



One of our boys who is making a name for himself is T. Norbert Beaupre, who graduated in Horticulture in 1939 and got his Master's degree two years later. A few weeks ago he was appointed Assistant Deputy Minister of Defence Production at Ottawa.

"Beaup" went into the Army Service Corps as soon as he left Macdonald, and served in Canada, the United Kingdom, Sicily, Italy and North-west Europe. He emerged from his wartime service with the rank of major, and was mentioned in despatches in September, 1945.

His experience in the R.C.A.S.C. got him interested in commerce, and he found himself a job, after his discharge from the Army, with the Trade Commissioner Service in 1946. The following year he was posted to the Canadian Embassy in Washington, but he was called back to Ottawa within a year to undertake special duties with the European Recovery Programme. In 1949 he was appointed executive assistant to the Deputy Minister, Department of Trade and Commerce.

In 1950 he went with Hon. Lester Pearson to the Commonwealth Conference at Colombo, Ceylon, then continued on a round-the-world trip with other high-ranking Canadian officials as trade adviser. Back home again, he was tapped for another promotion—this time to the job of special assistant to the Deputy Minister of Defence Production, and in this capacity he went to England with the Hon. C. D. Howe to the Commonwealth Supply Ministers' Conference. This was in the fall of 1951.

In his latest post, Mr. Beaupre becomes one of the Government's top bracket armament advisers, with special

responsibilities in the field of manpower, materials control and production of armaments for North Atlantic countries.

Farm Day on June 21st

One of the biggest problems facing farmers in Quebec is how to get better results from grass. Our province is best suited for growing grasses, as you no doubt have heard stated many times. As a matter of fact grass is our main cash crop seeing that our whole livestock industry depends on it. So with that in mind most of you will be interested in attending Farm Day at Macdonald College on Saturday, June 21st.

Grassland will be the emphasis this year. You might even say that in many ways it will be a Grassland Field Day. In the first place at the Quebec Farm Forum meeting in the morning the guest speaker will be Lester H. Smith, Extension Agronomist from the University of Vermont. Mr. Smith has been encouraging better pasture management in the State of Vermont and is well qualified to speak on the subject of "Better Returns from Your Grassland."

The exhibits put on by each College department will be related to the general theme of "Making Grasslands Pay". Many helpful hints about fertilization, new legumes and grasses, pasture management, etc. will be featured. These exhibits should be well worth visiting.

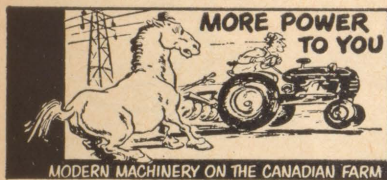
Many of you have been thinking about grass silage. Well, you won't be disappointed because in the afternoon of Farm Day one of the four demonstrations will be the use of inexpensive machinery for putting up grass silage. Professors Ness, Banting, and Stepler will be on hand to answer questions. These men will represent the Animal Husbandry, Agricultural Engineering and Agronomy Departments at Macdonald College.

Other demonstrations in the afternoon will include the planting of ornamental trees and shrubs put on by the Horticulture Department. The Animal Husbandry Department will parade a group of dairy calves and discuss the feeding and development at different ages. Up at Morgan's Woods Dean Brittain has arranged a demonstration of woodlot tree planting and log loading. Dr. Brittain reports that this demonstration will be put on by the International Paper Company which does both of these time-consuming jobs by mechanical means.

8 KEYS... TO BETTER FARMING

These eight booklets contain information on the latest methods of profitable farming. Approved—and praised—by agricultural authorities in governments, universities, and farm organizations, the

booklets are recommended reading for every progressive farm family. The manager of your local branch of The Canadian Bank of Commerce will be pleased to give you copies. Call on him soon.



explains farm mechanization in keeping with good business practice.



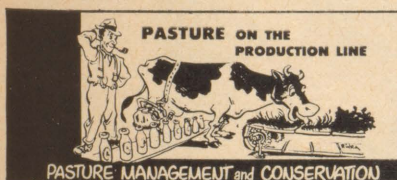
how better handling of farm products improves quality and profits.



how a farm can be run as a profit-sharing partnership.



on the new trend in labour-saving farm buildings.



deals with grazing control and soil conservation.



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the combination of factors which help you realize top production.



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